

THE INFLUENCE of Learning Environment and School Climate on Student Engagement among Private Schools in Davao CITY

Eve B. Tablon¹, Girlie Mae P. Zabala²

¹University of Immaculate Conception

²Graduate School Department, University of the Immaculate Conception, Davao City, Philippines

gzabala@uic.edu.ph

ABSTRACT

This study determined the influence of the learning environment and school climate on student engagement among Grade 8 students in the selected private high schools in Davao City. Three adapted survey instruments were used to determine the levels of learning environment, school climate, and student engagement. Data gathered were then analyzed and interpreted. Mean, standard deviation, Pearson r , and multiple regression analysis were the statistical tools used for the data treatment. The results revealed that the learning environment, school climate, and student engagement were rated as high. Further, school climate had a significant strong relationship with student engagement, and the learning environment had a significant positive moderate relationship with student engagement. Furthermore, in a singular capacity, the result also showed that school climate had a significant influence on student engagement, while the learning environment had no significant influence on student engagement. Notably, the combined influence of the two independent variables, learning environment, and school climate, on student engagement was significant.

KEYWORDS: *Education, learning environment, school climate, student engagement, descriptive correlational, Philippines*

INTRODUCTION

Student engagement is an important notion that is used to understand student behavior in the process of instruction and learning (Delfino, 2019). Student engagement is also characterized by students' level of interest, how they connect with a certain number of students in the class, and their desire to learn about the contents (Briggs, 2015). Their engagement plays a crucial role in achieving academic success (Enerio, 2021). However, issues with student engagement have been identified. As noted by Abramovich et al. (2019),

students received low academic scores and struggled to learn due to a lack of engagement, motivation in the classroom, and lack of an instructional environment conducive to activity-based learning; students need to be more productive and motivated to learn. Disengagement has significant human and social costs in the short and long term. Students who lack engagement are at a higher risk of dropping out before completing high school and are less inclined to pursue higher education (Fraysier et al., 2020).

In the Philippines, according to statistics from the Commission on Higher Education (2020) as cited in Enerio (2021), there was a lack of student engagement in some of the private schools in Mindanao from AY 2015–2016 to AY 2018–2019, with an overall rate of 19.8 percent. From 2014 to 2018, the national passing rate was 38.26 percent. The said private school's graduate and board test passing rates are below average due to a lack of student engagement. In Davao City, Bendejo and Gempes (2019) reported that student engagement in any school-related activity is relatively low in Davao City. Many Filipino adolescents opt to quit school early because they are dissatisfied with the school climate, and school parental engagement rates are exceedingly low.

Further, according to Gurzynski-Weiss et al. (2015), there is a substantial positive correlation between student engagement, learning environment, and school climate. A helpful learning environment and an excellent school climate are associated with higher levels of student engagement. Classrooms foster student-centered learning by utilizing students' interests and current demands for ideal instructional activities. A healthy school climate influences student success; one aspect that influences the school climate is having a safe school (Ortiz, 2017). A person's personality and efforts to acquire academic engagement are mirrored in how teachers treat them, and they influence both learning and teaching. The characteristics of a school can influence student engagement (Yusof, 2012).

Furthermore, there needs to be a more comprehensive study on student engagement and processes across time, particularly in higher-learning classroom settings and their influence on the learning environment (Haggis, 2019; Skordi & Fraser, 2019). It seems necessary to conduct research exploring the connections between learning environment factors, such as space and infrastructures, and how classroom design and technology resources influence the entire educational experience and engagement of the students (Acton, 2018).

Despite the considerable literature stated above, most research focused on students' engagement in colleges, higher education, and public schools (Korobova, 2012). Relatively, some studies should have included the opportunity to integrate these learners and sustain their engagement with their learning environment (Siczek, 2015). Moreover, the researcher failed to come across a study that explored the combined influence of the variables under study in the local setting.

In this context, the researcher feels the urgency to study the relationship between learning environment, school climate, and student engagement. Further, the results could be used as the basis for the school administration to promote student engagement. Furthermore, this research is essential for supporting students and instructors in creating mutual understandings regarding performance and student participation expectations.

The findings can be used by faculty and staff to understand student engagement better and design successful cross-cultural approaches to encourage student engagement. This will also enable principals to continue implementing programs that will improve student engagement in school and elevate the learning environment, which may help improve academic engagement.

The findings of this study will be shared with the participating Davao City private schools and other institutions. Also, the study will be presented in the local, national, or international research forums. Likewise, the researcher has plans to publish the findings in a peer-reviewed journal.

Theoretical Lens

This study used the **Bio-Ecological Theory** (Bronfenbrenner, 1986) and **Sociocultural Theory** (Vygotsky, 1934). **Bio-ecological Theory** states that environmental layers influence the learning environment, school climate, and student engagement in the classroom. The interaction between individuals and the environment shapes the development of humans. Thus, social, emotional, and cognitive parts of a student's engagement are linked to the school's environment and school climate. This means that families, schools, and communities have an impact on student learning and participation. Students are more engaged and learn better when their needs are met at home and school. It must be noted that biological and environmental factors affect student engagement and development, too. Thus, school climate, the learning environment, and student-teacher connections all influence the social, cognitive, and academic engagement of the students. Further, the **Sociocultural Theory** states that socialization affects the learning process in an individual through the learning environment and its climate. He believed that students learn best

through active engagement and expanding their current involvement at school when they feel the support coming from their teachers and experience conducive facilities at school. Students focus better when they are comfortable and have a quality learning environment at school; they are more likely to attend lessons and are less likely to become ill, all while knowing they are safe and not being bullied. Thus, social interaction in facilitating the student is needed from the interaction with others in the social environment.

METHODS

Research Design

This quantitative research utilized a descriptive correlational design. Quantitative research refers to objective measurements, employing methods such as statistical analysis and numerical data collection (Creswell, 2015). Data is gathered through diverse approaches, including polls and surveys. Further, Creswell (2012) and Fraenkel et al. (2012) define quantitative research as concerned with objective criteria and the numerical, statistical, or mathematical evaluation of data gathered through polls, questionnaires, and surveys, as well as the modification of previously gathered statistical data using computer tools. Also, Creswell (2012) used a quantitative methodology to investigate student observable behavior in the classroom. A descriptive correlational design was employed in the research project. The weighted mean and standard deviation were utilized to characterize and assess the elements, breadth, and importance of action research. The variables can be measured, often employing tools, and the resulting numerical data can be analyzed statistically (Creswell, 2008). Descriptive correlational design is a research strategy that provides static depictions of situations and establishes connections between variables, allowing researchers to understand the relationships between different components (McBurney & White, 2010). The study utilized a descriptive correlational design to investigate the relationship between the learning environment and school climate on student engagement, measuring behavioral, cognitive, and emotional aspects.

Place of Study

This research was carried out among the private schools in Davao City. The city is physically located in Davao del Sur province and is categorized as such by the Philippine Statistics Authority, yet it is administered and maintained independently of the province (NEDA, 2014). Three schools, identified as School A, School B, and School C, were selected for the study. Further, these private schools make more significant investments in facilities, technology, and

resources, all of which can influence factors that this study dealt with. These private schools adhered to particular principles or practices that highlighted a certain manner of instruction and how these factors enabled a deeper investigation of the variables.

Respondents

The study involved 120 Grade 8 students from three private schools in Davao City, using the total enumeration technique for purposive sampling to determine the correlations of the two independent variables and one dependent variable. To improve data validity, the researcher recruited all eighth-grade students and distributed a questionnaire. In the study, respondents were selected based on the following inclusion criteria: First, students who were officially enrolled for the School Year 2022-2023 in the three private schools became the study's respondents. Second, since participation in this study is voluntary, students who submitted their signed Assent Parent's Consent Form and Informed Consent Form (ICF) were chosen to participate in this study. Third, adapted survey questionnaires on the learning environment, school climate, and student engagement were utilized to serve as survey questionnaires.

Statistical tools

The researcher used the following statistical tools to analyze the data. **Mean** was used to determine the level of the learning environment, school climate, and student participation in Schools A, B, and C in this study. **Standard Deviation** was used to determine how far the data differed from the mean. **Pearson-r or The Pearson Product-Moment Correlation Coefficient** was used to assess the strength of a two-variable linear connection and to measure the relationship between learning environment, school climate, and student engagement in Schools A, B, and C. **Multiple Regression Analysis** was used to determine the significance of the influence of learning environment and school climate on student engagement.

RESULTS

Level of Learning Environment

Table 1

Level of Learning Environment

Indicator	Mean	SD	Description
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Educational Adequacy	4.0	.57	High
Environment for Education	3.82	.65	High
Visual Reinforcement	4.03	.70	High
Overall Mean	3.95	.57	High

Table 1 shows the level of learning environment among private junior high schools in Davao City. It shows that the overall mean of the learning environment is 3.95, which is described as high. This means that the learning environment is oftentimes observed. The result implies that the learning environment had an impact on the students, as schools are specifically designed for optimal teaching and engagement experiences that go beyond mere instruction, leaving a lasting impression in shaping the students' educational experience by providing opportunities for firsthand experience in the learning environment. In addition, the overall standard deviation is .57, which is less than one, denoting that the respondents have ratings that clustered near the mean. It can be interpreted as a positive aspect, indicating a general consensus or similarity in the opinions or evaluations expressed by the respondents.

The indicator with the highest mean is visual reinforcement. The mean ratings range from 4.00 to 4.08. It has a category mean rating of 4.03 described as high which means that visual reinforcement in private junior high schools is oftentimes observed. This implies that visual reinforcement, including the use of posters and portable displays and the highlighting of student and class accomplishments, is commonly observed in selected private junior high schools in Davao City. Additionally, showcasing student and class achievements through visuals contributes to a more engaging and satisfying learning experience. This finding supports the study of Bobek and Tversky (2016), which indicates that a high level of visuals helps students make sense of the content and direct attention, increasing the possibility that the learners will remember the material. Their study showed that when students use pictures or visual aids, it becomes easier for them to understand the information. Meanwhile, the indicator with the lowest mean is environment for education. The means of this indicator ranged from 3.03- 4.38. The category mean is 3.82, which means it is oftentimes observed by the students in selected private junior high schools in Davao City. This implies that the environment for education is generally positive and effective, contributing to a favorable learning experience for the students. This finding aligns with the study of Asiyai (2014), which highlights the importance of the educational environment in fostering intellectual curiosity and holistic

student development. Likewise, the result supports the finding of Asibaka (2018), which indicated that students prefer a pleasant and adequate environment for education with motivating resources and minimal noise.

Level of School Climate

Table 2 shows the level of school climate of private junior high schools in Davao City. It shows that the overall mean school climate is 3.94, which is described as high. This means that school climate is oftentimes evident. The result implies that the school climate cultivates solid teacher-student relationships, improving communication, trust, and mutual respect. These positive dynamics enhance classroom management and the support they receive from their teachers. Investing in a supportive school climate can nurture positive interaction and develop a sense of belonging to the school as the students experience a meaningful quality education. The overall standard deviation of .52 indicates that respondents' ratings are clustered near the mean. It can be interpreted as a positive aspect, indicating a consensus or similarity in the opinions or evaluations expressed by the respondents.

Table 2
Level of School Climate

Indicator	Mean	SD	Description
Teacher Support	4.48	.57	Very High
Classroom Management	4.13	.70	High
Relation with Teachers	4.10	.73	High
Sense of Belonging to the School	3.37	.61	Moderate
Attitude Towards school: Learning Outcomes	3.32	.77	Moderate
Attitude towards School: Learning Activities	4.21	.79	Very High
Over-all Mean	3.94	.52	High

The indicator with the highest mean is teacher support. The mean of this indicator ranged from 4.38 to 4.58. The category mean of 4.48 is described as very high, which means that the school climate in terms of social support is always evident. The result shows that Grade 8 students receive social support provided by their teachers, which is consistently practiced within the school environment. The result aligns with the study of Reddy et al. (2013), which stated that higher levels of perceived teacher support in the form of advice-giving and information improved school outcomes. Similarly, the finding confirms the study conducted by Guess and McCane-Bowling (2016), which stated that higher levels of support from teachers can help children develop a pleasant emotional state.

Meanwhile, the indicator with the lowest mean is the attitude towards school: learning outcomes—notably, the mean ranges from 2.22 to 3.87. The category mean is 3.32, which is described as moderate, which means that the attitude towards school regarding learning outcomes in selected private junior high schools in Davao City is sometimes evident. The result implies that most students do not view their classes as unproductive or unimportant. Students believe their education has equipped them with the knowledge and skills to make informed decisions. This finding affirms the study of Shochet and Smith (2012), which stated that delegating decision-making duties to other instructors and students empowers all participants in educational situations. Further, the finding supports the study of Rudduck and Flutter (2004), who noted that participation in making decisions can be a helpful guide in dealing with activities where sharing responsibilities with other students gives all those involved in their educational experience.

Level of Student Engagement

Table 3 shows the level of student engagement in private junior high schools in Davao City, which has an overall mean of 3.46. It is described as high, meaning student engagement in selected private junior high schools in Davao City is oftentimes manifested. The overall standard deviation is .53, denoting that the respondents' responses are closer to the mean. The result implies that students' engagement in various academic and co-curricular activities is manifested within these educational institutions and in their academic pursuits, which shows a strong level of interest and commitment.

Table 3
Level of Student Engagement

Indicator	Mean	SD	Description
Behavioral Engagement	2.38	.82	Low
Cognitive Engagement	3.85	.77	High
Emotional Engagement	4.14	.68	High
Overall Mean	3.46	.53	High

The indicator with the highest mean is emotional engagement. The means of this indicator ranged from 3.95 to 4.45. The category mean is 4.14, which is described as very high, meaning that emotional engagement in private junior high schools is often manifested. The result suggests that students generally feel a sense of belonging to their school community. Also, they perceive fairness in disciplinary practices by the principal. This finding supports the study of Dixson (2015), which showed that when students find a subject engaging and obtain the capacity to relate it to their own lives, they become more emotionally involved with the subject. Further, the finding confirms the statement of Williams et al. (2013), which revealed that positive emotions boost cognition, attention, and movement. Increased brain activity that assists cognitive processes is related to these emotions.

Furthermore, promoting open communication and providing chances for students to express their views, ideas, and feelings are important components of building emotional engagement. Students have a greater sense of ownership over their learning when encouraged to communicate their opinions and feelings (Black & Allen, 2018). Meanwhile, the indicator with the lowest mean is behavioral engagement. The mean ratings range from 1.49 to 4.45. The category mean is 2.38, which is described as low, which means that behavioral engagement in private junior high schools is rarely manifested by the students. The study found that while truancy is rarely observed, university aspirations are highly manifested among students in private junior high schools in Davao City, suggesting room for improvement in their behavioral engagement.

This finding supports the argument of Hattie and Anderman (2013), who

stated that students' behavioral engagement will likely result in increased academic achievement and greater school retention. Further, the result supports the study of Virtanen et al. (2014), which states that the increase in positive behavior leads to a decrease in the truancy rate. As positive behavior increases, it contributes to a more harmonious educational environment and acts as a mechanism for tackling truancy rates.

Significance of the Relationship of Learning Environment, School Climate, and Student Engagement

Table 4

Significance of Relationship of Learning Environment, School Climate, and Student Engagement

	Student Engagement in Private Junior High Schools		
	r	p-value	Remarks
Learning Environment	.56**	.00	Significant
School Climate	.75**	.00	Significant

***.* Correlation is significant at the 0.01 level (2-tailed)

Table 4 shows the relationship between learning environment, school climate, and student engagement in selected private junior high schools in Davao City. This shows that the learning environment has a positive moderate relationship ($r=.56$) with student engagement in private junior high schools. The result shows a p-value of .00, which is less than the alpha set at .05 (two-tailed), which is significant. The result means that as the level of learning environment increases, student engagement in selected private junior high schools also significantly increases. Likewise, the result shows that school climate has a positive, strong relationship with student engagement in private junior high schools with an r-value of .75. The p-value of their relationship is .00, which is less than the alpha set at .05. Hence, the relationship is significant. This means that as the level of the school climate increases, student engagement in private junior high schools also significantly increases.

The results support the claim by Gurzynski-Weiss et al. (2015) that a strong positive correlation exists between student engagement and the learning environment and the school climate. Higher student engagement levels correlate with a supportive learning environment and a pleasant school atmosphere. Likewise, Ortiz (2017) stated that true creative spaces will improve learning possibilities in various ways, including reducing pre-task setup time, supporting student-centered courses, equalizing participation, and allowing students to work with more peers than in traditional classrooms. Furthermore, the findings confirm the research by Wang and Degol (2016), which found that a well-maintained learning environment devoid of bullying and supportive student-teacher relationships increased levels of student connection and engagement in school. Added on, a supportive and safe environment at school can help students stay emotionally well and interested in learning. For example, a safe physical setting and supportive student-teacher relationships keep students emotionally engaged, safe, and secure in learning activities, resulting in high school engagement (Gemici & Lu, 2014; Gauley, 2017). Moreover, the findings conform with the study of Wang and Eccles (2013), which demonstrated a substantial association between student emotional engagement, social characteristics, supportive student-teacher interactions, and a secure learning environment. In addition, the results support the view of Dary and Pickeral (2013) and Lenzi et al. (2014), which posited that a healthy school climate can motivate students to maximize their potential development and boost student engagement in academic activities.

Significance of the Influence of Learning Environment, and School Climate towards Student Engagement

Table 5 shows the results of the multiple regression analysis. In singular capacity, the learning environment has no significant influence on student engagement in private junior high schools with a p-value of .99, which is greater than the .05 level of significance (2-tailed) with a positive standardized beta value of .00. It means that for every unit increase in the value of the level of the learning environment, there is a corresponding increase of only .01 in the student engagement in the private junior high schools which is not significant. However, in singular capacity, the school climate has a significant influence on student engagement in private junior high schools with a p-value of .00, which is less than the .05 level of significance (2-tailed) with a positive standardized beta value of .75. It means that for every unit increase in the school climate, there is a corresponding significant increase of .75 of the student engagement in private

junior high schools.

Table 5

Significance of the Influence of Learning Environment, and School Climate towards Student Engagement

Student Engagement in Private Junior High Schools				
Singular Influence of the Predictors	Standardized Coefficients	t	p-value	Remarks
Learning Environment	.00	.01	.99	Not Significant
School Climate	.75	8.22	.00	Significant
Combined Influence of the Predictors				
Learning Environment and School Climate				
R	.75			
R ²	.57			
F	75.83			
p	.00			Significant

Notably, the combined influence of the two independent variables, learning environment and school climate, towards student engagement in private junior high schools is significant ($F = 75.83$, $p < .05$). Meanwhile, the model explains 57 percent of the variance of student engagement in private junior high schools based on the independent variables explored in this study as indicated by $R^2 = .57$. This means that 43 percent of the variance of the student engagement in private junior high schools can be attributed to other factors aside from learning environment, and school climate.

The finding is in consonance with the study of Kraft and Dougherty (2013), which stated that parental participation influenced student engagement, particularly in the context of interactions with instructors. Likewise, the finding

confirms the study of Firestone (2014), which revealed that a negative learning environment or setting that adversely affects student learning can affect students in many ways, such as low student engagement, poor behavior, student anxiety, or depression. Further, the finding supports the study of Akan et al. (2013), which stated that school climate in the classroom promotes student-centeredness, maintains order in the classroom, has active participation and collaboration among students, increases student engagement, and makes classroom management easier. Furthermore, the quality of the learning environment influences students' perceptions of school climate and thus can serve as a source of community pride, with better facilities improving student health, retention, and attendance, thus enhancing student engagement (Uline et al., 2018). Also, the study discovered that positive contacts between school and family can increase student engagement (Mutch & Collins, 2012; Wang & Neihart, 2015).

CONCLUSION

Based on the findings, the following conclusions were drawn: The level of the learning environment was described as high, which showed that the learning environment is oftentimes observed. This finding connotes that educational adequacy, environment for education, and visual reinforcement are oftentimes observed. This implies that schools are established for teaching and learning with the quality of the learning environment students are using. The level of school climate was described as high, which showed that school climate is oftentimes evident. This means that students perceived a positive atmosphere and conducive learning environment that contributes to a more enjoyable and satisfying experience associated with improved academic engagement. The level of student engagement was described as high which showed that student engagement is oftentimes manifested. This suggests that students' engagement in various academic and co-curricular activities is manifested within these educational institutions and in their academic pursuits, which show a strong level of interest and commitment. The school climate has a significant positive, strong relationship with student engagement. This means that as the level of the school climate increases, student engagement also significantly increases. Likewise, the learning environment has a significant positive moderate relationship with student engagement. School climate has a significant influence and predicted more on student engagement. Further, it means that for every unit increase in the school climate, there is a corresponding significant increase in student engagement. This also showed that there is a substantial amount of variance in student engagement that can be attributed to other factors aside from the learning environment and school climate.

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